

WHAT IS CLAIMED IS:

1. A weighing and flavoring system for producing bags containing flavored articles, said weighing and flavoring system comprising:

a measurer for measuring a quantity of articles;

5 a flavoring apparatus, disposed downstream of said measurer, for supplying a predetermined quantity of flavoring, thus flavoring the articles;

a check measurer, disposed downstream of said flavoring apparatus, for measuring a quantity of the flavored articles;

10 setting means for setting at least one threshold value based on the quantity of the articles as measured by said measurer; and

a sorting unit for sorting the flavored articles based on said at least one threshold value according to the quantity of the flavored articles as measured by said check measurer.

15 2. The weighing and flavoring system according to claim 1, wherein:

said at least one threshold value includes a plurality of low limit values and a plurality of high limit values.

3. The weighing and flavoring system according to claim 1, wherein:

20 said at least one threshold value includes a minimum low limit value, which indicates that no flavoring has been added by said flavoring apparatus.

4. The weighing and flavoring system according to claim 1, further comprising

control means for controlling the predetermined quantity of the flavoring supplied

25 by said flavoring apparatus based on the quantity of the flavored articles as measured by said check measurer and the quantity of the articles as measured by said measurer.

5. The weighing and flavoring system according to claim 4, wherein:

a quantity of the flavoring actually added to the articles by said flavoring apparatus

30 is calculated from the quantity of the flavored articles as measured by said checker measurer and the quantity of articles as measured by said measurer, and

said control means controls the predetermined quantity of the flavoring supplied by said flavoring apparatus based on the quantity of the flavoring actually added to the articles.

5 6. The weighing and flavoring system according to claim 1, further comprising:
a packager for packaging the flavored articles into a package, said packager being disposed between said flavoring apparatus and said check measurer,
said check measurer measures the quantity of the flavored articles taking into account a quantity of the package in which said packager packages the flavored articles.

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7. The weighing and flavoring system according to claim 1, wherein:
the predetermined quantity of flavoring supplied by said flavoring apparatus is determined based on the quantity of the articles as measured by said measurer.

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8. The weighing and flavoring system according to claim 1, wherein:
the predetermined quantity of flavoring supplied by said flavoring apparatus is determined based on a type of the flavoring to be supplied.

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9. A weighing and flavoring system for producing bags containing flavored articles, said weighing and flavoring system comprising:

a measurer for measuring a quantity of articles;

a flavoring apparatus, disposed downstream of said measurer, for supplying a predetermined quantity of flavoring, thus flavoring the articles;

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a check measurer, disposed downstream of said flavoring apparatus, for measuring a quantity of the flavored articles; and

control means for controlling the predetermined quantity of the flavoring supplied by said flavoring apparatus based on the quantity of the flavored articles as measured by said check measurer and the quantity of the articles as measured by said measurer.

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10. The weighing and flavoring system according to claim 9, wherein:

a quantity of the flavoring actually added to the articles by said flavoring apparatus is calculated from the quantity of the flavored articles as measured by said checker-measured weight and the quantity of articles as measured by said measurer, and

5 said control means controls the predetermined quantity of the flavoring supplied by said flavoring apparatus based on the quantity of the flavoring actually added to the articles.

11. The weighing and flavoring system according to claim 9, further comprising:
a packager for packaging the flavored articles into a package, said packager being
10 disposed between said flavoring apparatus and said check measurer,
said check measurer measures the quantity of the flavored articles taking into account a quantity of the package in which said packager packages the flavored articles.

12. The weighing and flavoring system according to claim 9, wherein:
15 the predetermined quantity of flavoring supplied by said flavoring apparatus is determined based on the quantity of the articles as measured by said measurer.

13. The weighing and flavoring system according to claim 9, wherein:
the predetermined quantity of flavoring supplied by said flavoring apparatus is
20 determined based on a type of the flavoring to be supplied.

14. An apparatus for packaging articles, said apparatus being adapted to apply an additive to the articles and comprising
a weigher for dispensing a predetermined quantity of the articles;
25 an additive dispenser for supplying a quantity of the additive to the dispensed predetermined quantity of the articles to produce a mixture;
a packaging machine to which the dispensed quantities of articles and additive are supplied, said packaging machine packaging the dispensed quantities of the articles and additive in a package;
30 a check weigher for monitoring a combined weight of the package and the mixture;
and

a controller for controlling said additive dispenser in response to an output from said check weigher in order to adjust the quantity of additive supplied by said additive dispenser, such that the combined weight of the package and the mixture meets a predetermined requirement.

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15. The apparatus according to claim 14, further comprising
a mixer disposed upstream of said packaging machine for producing the mixture by mixing in the dispensed quantities of articles and additive.

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16. The apparatus according to claim 15, wherein
said mixer includes an Archimedean screw.

17. The apparatus according to claim 14, wherein
said weigher is a combinational weigher.

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18. The apparatus according to claim 14, wherein
said packaging machine is a vertical form fill seal packaging machine.

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19. The apparatus according to claim 14, wherein
said dispenser includes a bulk hopper and a compressed gas transport.

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20. A method for packaging articles, comprising steps of:
dispensing a predetermined quantity of the articles;
supplying a quantity of additive to the dispensed predetermined quantity of the
articles to produce a mixture;
packaging the dispensed quantities of the articles and the additive in a package;
monitoring the combined weight of the package and the mixture; and
adjusting the quantity of additive supplied such that the combined weight of the
package and the mixture meets predetermined requirements.

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21. The method according to claim 20, wherein

the mixture is produced by mixing the dispensed predetermined quantity of the articles with the quantity of the additive prior to said packaging.

5 22. The method according to claim 20, wherein
the articles are dispensed by a combinational weigher.

10 23. The method according to claim 20, wherein
the dispensed predetermined quantity of the articles and the quantity of additive are
packaged using a vertical form fill seal packaging machine.

24. The method according to claim 20, wherein
the articles are a foodstuff.

15 25. The method according to claim 24, wherein
the foodstuff are potato chips.

26. The method according to claim 20, wherein
the additive is a flavoring.